

REMARKS

Applicant is in receipt of the Office Action mailed July 15, 2003. Claims 1-16, 21-43, 45-65 and 67-89 were rejected under §102(b) as being anticipated by U.S. Patent No. 5,862,372 to Morris et al. This rejection is respectfully traversed.

The present application is directed toward a method for programmatically creating a graphical program in response to functions that have been specified by a user. As one example, the user may select various image processing functions to be performed on an image, and these user selected image processing functions may be recorded in memory as they are selected or performed. When the user has finished selecting functions to be performed on the image (and presumably the desired result has been achieved on the image), a software program may operate to programmatically generate a graphical program that implements these functions (i.e., an image processing algorithm that includes the user selected functions in the order in which the user selected them). This example is discussed in the specification with respect to Figures 6 – 14.

The present application describes a conventional prior art method for creating a graphical program with respect to Figures 4, 5A and 5B. As discussed, the conventional prior art method for creating a graphical program involves the user selecting graphical program nodes or objects, e.g., by dragging them from a palette into a block diagram window, and then interconnecting these nodes or icons together. This technique is described in greater detail in, for example, U.S. Patent No. 4,901,221, among others. Applicant submits that the Morris, et al. patent, at most, teaches this prior art technique.

Claim 1 recites as follows:

1. A method of creating a graphical program to perform an algorithm, the method comprising:
 - recording one or more functions in response to user input, wherein the one or more functions specify the algorithm; and
 - automatically generating the graphical program in response to the recorded one or more functions, wherein the graphical program comprises a plurality of interconnected nodes which visually indicate functionality of the graphical program, wherein the graphical program implements the algorithm.

With respect to the “recording step” the Office Action states that Morris discloses “recording functions in response to user input” citing column 2 lines 20-27. The cited portion of Morris refers to prior art systems which involve selection and interconnection of logical operators or icons to create a program. Thus, the cited portion of Morris involves creating a program.

With respect to the “automatically generating step” the Morris patent cites column 3 lines 29-35. Here, the Morris patent refers to a user directly selecting and dragging icons on to the screen in a certain order to specify a sequence of operations or “script”. For example, Morris states at column 3 line 32 that “Icons representing the objects (and accordingly their functionalities) may be placed (dragged) into an appropriate view. The system of the invention generates the information needed by the run time program.” The Morris et al. patent further describes this operation at col. 5 lines 13 – 22:

During the development of an application with the system of this invention, the user directs the incorporation of objects into one of the four views, modifies the properties associated with that object, and interconnects the objects so chosen. . . . As the system responds to the user's directions, it creates a script representing the application being developed by the user. When the development process is complete, the user stores the script on one of the system's storage devices.

One of the interesting features of the object oriented authoring system of this invention is that no traditional looking code, written in a programming language, is generated by the system. Rather, the output of the authoring system is a listing of the objects in order of appearance (in the program sequence) along with the properties associated with that object at that place in the sequence. The properties are the information or settings which specify to the object how it will perform. The computer implemented application development system records the settings for the objects and the order of execution of the objects in an output script. Thus, the system operates only at the object level. As the author proceeds in developing the application, the system adds to the script.

Thus the Morris patent describes operation where a user manually selects objects or icons and interconnects them together to specify a script.

Claim 1 refers to “automatically generating a graphical program”. This automatically generating comprises programmatically generating the graphical program, e.g., where a software program analyzes the recorded functions and then automatically

generates the graphical program based on these recorded functions. The cited portion of Morris is comparable to the prior art method of a user manually creating graphical programs as described in Figures 4, 5A and 5B of the present application, (i.e., the user manually adding objects or icons to a graphical program and manually connecting them in a desired way). The teaching of Morris is analogous to this prior art method of manually creating a graphical program, except that a script is then created based on the sequence of objects that the user selects and interconnects.

In the Morris patent, the user manually assembles a block diagram (as shown in Figure 2 of Morris) in order to specify a script. In the system of the present application, the user first provides input to create a prototype or script, and then a software program executes to programmatically generate a graphical program which implements the script. Thus, the method of the present application is virtually the opposite of that taught in Morris. Significantly, Morris does not teach or suggest any type of programmatic generation of a graphical program. Rather, Morris teaches that a user is required to manually assemble a block diagram.

Thus, Applicant submits that Morris simply does not teach or suggest “automatically generating a graphical program” The cited portion of Morris refers to the user actually dragging the objects into the appropriate view, which is not an automatic creation of a graphical program, but rather is a manual creation.

In addition, the two cited portions of Morris (one from the Background section and one from the Summary of the Invention section) which allegedly teach the recording step and the automatically generating step both involve selecting or dragging objects or modules into an application under development. Applicant submits that these cited portions do not represent any type of coherent method that could be argued to teach or suggest the present claims.

Thus, Applicant submits that the various independent claims, and those dependent thereon, are allowable.

CONCLUSION

In light of the foregoing amendments and remarks, Applicant submits the application is now in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 50-1505/5150-44300/JCH.

Also enclosed herewith are the following items:

- ☒ Return Receipt Postcard
- ☒ Request for Continued Examination
- ☒ Fee Authorization

Respectfully submitted,



Jeffrey C. Hood
Reg. No. 35,198
ATTORNEY FOR APPLICANT(S)

Meyertons, Hood, Kivlin, Kowert & Goetzel PC
P.O. Box 398
Austin, TX 78767-0398
Phone: (512) 853-8800

Date: _____